

CONSTRUCTION BULLETIN 15-02

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Disposition and Handling of Wells on Project Sites

Purpose

Provide guidelines to the Resident Engineer (RE) if any of the following cases arise:

1. A previously hidden well is discovered on a project site during the construction phase;
2. A well was identified during the development phase but was incompletely or improperly documented and treated;
3. If the installation of a new well on the project site is desired during the construction phase.

Background

For the purpose of this bulletin, a well is defined as an excavated hole or penetration in the ground that is deeper than it is wide. It can be cased (lined) or placed in bare earth. Wells do not necessarily intersect the aquifer. The term “well” includes, but is not limited to:

- Water wells (drinking, irrigation, and recharge)
- Geotechnical penetrations (monitor wells, inclinometers, piezometers, soil sampling)
- Dry wells (only used to intercept stormwater)

Examples of features that are not considered to be wells:

- A drilled shaft for a bridge foundation, regardless of depth or presence of ground water, because it is filled with concrete soon after it is excavated;
- A geotechnical penetration that does not intersect the aquifer and is less than 100’ deep (if either the aquifer is intersected or the penetration exceeds 100’ then it becomes a well);
- A trench for utility placement or foundation work because it will be filled soon after it is excavated.

There are thousands of wells across Arizona and many lie hidden in the right-of-way (ROW) or other facilities such as maintenance yards and rest areas. Also, locally some ADOT crews might be aware of a well but do not realize that it has been inadequately identified to the Arizona Department of Water Resources (ADWR).

Coordinating Office

The ADOT Right-of-Way Group Property Management Section is responsible for documenting and tracking all wells inside the ROW or other ADOT facilities. Regardless of how or when the well became a part of the ROW, ADOT becomes responsible for it and is obligated to report its status to the ADWR. Even when a well is capped and formally abandoned, ADOT must report its presence and status to the ADWR in perpetuity.

The Water Rights and Well Unit Coordinator can be reached at 602-712-7435.

Procedures

Case #1: Previously Hidden Well Discovered During the Construction Phase

Once the RE becomes aware of the discovered well then the RE must perform the following tasks:

- Direct the contractor to secure the well site in order to prevent people, animals, debris, or stormwater from entering it; mark the well for easy field identification;
- Call the Well Unit Coordinator and provide description and location information.

The Well Unit Coordinator will accommodate the project’s needs:

- If the well is no longer needed, the Coordinator will arrange for a specialty contractor to mobilize to the site and cap the well in preparation to formally abandoning it.
- If the well needs to be preserved, then the Coordinator will communicate with other ADOT offices, the ADWR, and potentially private parties:

- Examples: an inclinometer buried in an earlier landslide, a dry well that still might be needed for proper drainage, or a gas station monitor well in the highway inadvertently covered by an earlier pavement preservation job.
- The Coordinator will check with other ADOT offices then respond back to the RE for any follow up actions.

Case #2: Well Identified During Development Phase but Improperly Treated

Similar to Case #1, once the RE becomes aware of a problem with an existing well on the project site then the RE must perform the following tasks:

- Direct the contractor to secure and mark the well site;
- Call the Well Unit Coordinator.

The Well Unit Coordinator will accommodate the project's needs as noted in Case #1.

Case #3: New Well Needed on the Project Site

If the contractor wants to install a new well on the project site during the construction phase (example due to a diminished availability of surface water or utility-provided water), then the RE must perform the following tasks:

- Call the Well Unit Coordinator and describe the contractor's goals; provide description and location information.
- The Well Unit Coordinator will provide further guidance to ensure that ADOT remains in compliance with ADOT and ADWR policies.
- Note: The RE needs to plan with the Coordinator whether the well is to be abandoned after the project is complete or preserved for future use.

What Not to Do

- Do not allow the contractor to simply cap and bury a well.
- Do not leave the Well Unit Coordinator off the distribution list on email, memorandums, etc. when dealing with well issues.

ALWAYS CALL THE WELL UNIT COORDINATOR AT 602-712-7435